

6. What is claimed is:

1. A turning opening or closing member supporting structure of a helmet, i.e. a member to be opened or closed under its turning action such as a chin-ventilation or a shield, wherein there is provided an operating mechanism for the turning opening or closing member over a helmet and the turning opening or closing member;

said operating mechanism has a plurality of arc parts for use in controlling a turning action of the turning opening or closing member at any one of either the helmet or the turning opening or closing member;

said arc parts are constituted such that a plurality of more than two arcs having each of different centers of arcs are cooperatively arranged in an integral manner, at least one of the arcs has a center of arc outside the operating mechanism, each of the arc centers including the arc center is coaxial with a center of turning of the turning opening or closing member during its opening or closing operation, and the turning opening or closing member is turned along an orbit of each of the arcs; and thereby

the turning opening or closing member is turned along the orbit of each of said arcs while said center of turning

is being switched during its opening or closing operation.

2. A turning opening or closing member supporting structure,
wherein

the turning opening or closing member is a
chin-ventilation;

an operating mechanism for the turning opening or closing
member provided over a helmet and the turning opening or closing
member is provided with an arc part (U) at any one of the helmet
and the turning opening or closing member, with a first guide
shaft (S1) and a second guide shaft (S2) slidably engaged to
the arc part (U) at the other of the helmet and the turning
opening or closing member, a turning of the turning opening
or closing member is cooperatively controlled by these arc
parts (U) and the two guide shafts;

as said arc parts (U), a first engaging part (U1) with
an arc shape having a center of arc outside the operating
mechanism, a second engaging part (U2) with an arc shape having
a center of arc inside the operating mechanism and a third
engaging part (U3) with an arc shape having a center of arc
common to that of said first engaging part (U1) are integrally
and cooperatively arranged;

each of the centers of arc is coaxial with the center

of turning of the turning opening or closing member and the turning opening or closing member is turned along an orbit of the arc of each of the engaging parts; thereby

at the beginning of opening operation of the turning opening or closing member, the turning opening or closing member is guided around the center of turning of the first central point (P1) which is a common arc center held by both engaging parts under a cooperation of the first guide shaft (S1), the first engaging part (U1), the second guide shaft (S2) and the third engaging part (U3);

when the first guide shaft (S1) reaches a connecting point between the first engaging part (U1) and the second engaging part (U2) during the opening operation, the center of the second guide shaft (S2) reaches a second central point (P2) of the center of arc held by the second engaging part (U2) and at the same time the center of turning of the turning opening or closing member is switched from said first central point (P1) to the second central point (P2) and it is turned around the second guide shaft (S2).

3. A turning opening or closing member supporting structure, wherein

the turning opening or closing member is a shield;

an operating mechanism for the turning opening or closing member provided over a helmet and the turning opening or closing member is provided with an arc part (U') at any one of the helmet and the turning opening or closing member, with a first guide shaft (S'1) and a second guide shaft (S'2) slidably engaged to the arc part (U') at the other of the helmet and the turning opening or closing member, a turning of the turning opening or closing member is cooperatively controlled by these arc parts and the two guide shafts;

as said arc parts (U'), a first engaging part (U'1) with an arc shape having a center of arc outside the operating mechanism, a second engaging part (U'2) with an arc shape having a center of arc inside the operating mechanism are integrally and cooperatively arranged, each of the centers of arc is coaxial with the center of turning of the turning opening or closing member and the turning opening or closing member is turned along an orbit of the arc of each of the engaging parts; thereby

at the beginning of opening operation of the turning opening or closing member, it is turned around the center of turning of the first central point (P'1) which is the center of arc held by the first engaging part (U'1) under a cooperation of the first guide shaft (S'1), the second guide shaft (S'2)

and the first engaging part (U'1);

when the first guide shaft (S'1) reaches a connecting point between the first engaging part (U'1) and the second engaging part (U'2) during the opening operation, the center of the second guide shaft (S'2) reaches a second central point (P'2) of the center of arc held by the second engaging part (U'2) and at the same time the center of turning of the turning opening or closing member is switched from said first central point (P'1) to the second central point (P'2) and it is turned around the second guide shaft (S'2)..

4. A turning opening or closing member supporting structure according to claim 2, wherein

the first engaging part (U1), the second engaging part (U2) and the third engaging part (U3) are of a grooved shape;

the second engaging part (U2) and the third engaging part (U3) of the grooved shape are provided with a step difference, and each of the shafts is not displaced to the other engaging part also at a crossing part of both engaging parts.

5. A turning opening or closing member supporting structure according to claim 3, wherein

the first engaging part (U'1) and the second engaging part (U'2) are of a grooved shape; and

the first engaging part (U'1) and the second engaging part (U'2) of the grooved shape are provided with a step difference, and each of the shafts is not displaced to the other engaging part also at a crossing part of both engaging parts.